

MRID No. 444577-75

**DATA EVALUATION RECORD
VEGETATIVE VIGOR TIER I TEST
§ 122-1**

1. **CHEMICAL:** Prohexadione calcium PC Code No.: 112600

2. **TEST MATERIAL:** BAS 125 06 W Purity: 28.6%

3. **CITATION:**

Authors: R.S. Chetram

Title: Tier I - Vegetative Vigor Nontarget
Phytotoxicity Study Using BAS 125 06 W

Study Completion Date: July 9, 1997

Laboratory: ABC Laboratories California, Madera, CA

Sponsor: BASF Corporation, Research Triangle Park,
NC

Laboratory Study ID: 96576

MRID No.: 444577-75

DP Barcode: D245631

4. **REVIEWED BY:** Mark Mossler, M.S., Toxicologist,
Golder Associates Inc.

Signature: 

Date: 7/1/98

APPROVED BY: Pim Kosalwat, Ph.D., Senior Scientist,
Golder Associates Inc.

Signature: P. Kosalwat

Date: 7/1/98

5. **APPROVED BY:**

Signature: 

Date: 11/13/98

6. **STUDY PARAMETERS:**

Definitive Study Duration: 21 days

7. **CONCLUSIONS:** This study is scientifically sound but does not fulfill the guideline requirements for a vegetative vigor study with terrestrial plants. BAS 125 06 W at the maximum application rate (1.7 lb ai/A) plus 5.9 lb/A ammonium sulfate and 2.5 mL/L of surfactant were applied to ten species of terrestrial plants. None of the species tested were affected by 25% when compared to the control for each measured parameter.

8. **ADEQUACY OF THE STUDY:**

A. **Classification:** Supplemental.

- B. **Rationale:** The usage of the test material was not explained.
- C. **Repairability:** Yes, if the test material is always to be used with ammonium sulfate and a surfactant, then the results of the study may be upgraded to the "core" category. However, if the material can be used alone, it must be tested alone.
9. **GUIDELINE DEVIATIONS:** With the exception of lack of usage information, no deviations of consequence were noted.
10. **SUBMISSION PURPOSE:**
11. **MATERIALS AND METHODS:**

A. Test Organisms

Guideline Criteria	Reported Information
Species 6 dicots in 4 families, including soybean and a rootcrop; 4 monocots in 2 families, including corn.	<u>Dicots</u> : cabbage, cucumber, lettuce, radish, soybean, tomato <u>Monocots</u> : corn, oat, onion, ryegrass
Number of plants per rep 5	5
Source of Seed	Commercial suppliers

B. Test System

Guideline Criteria	Reported Information
Solvent	None
Site of test	Greenhouse
Planting method / type of pot	Planted in 7.5-cm square pots
Method of application	Spray booth
Method of watering	Hand watered avoiding foliage
Growth stage at application 1-3 true leaf stage	1-3 true leaf stage

C. Test Design

Guideline Criteria	Reported Information
Dose range 2x or 3x	N/A
Doses At least 5	1.7 lb active ingredient (ai) plus 5.9 lb ammonium sulfate applied per acre plus 2.5 mL of Latron AG 98/L of spray solution
Controls Negative and solvent	Negative (deionized water) control
Replicates per dose At least 3	5 replicates
Duration of test 14 days	3 weeks
Were observations made at least weekly?	Observations made on days 7, 14, and 21 after application
Maximum labeled rate	1.7 lb ai/A

12. REPORTED RESULTS:

Guideline Criteria	Reported Information
Quality assurance and GLP compliance statements were included in the report?	Yes
Was an NOEL observed for each species?	N/A
Phytotoxic observations	Yes
Were initial chemical concentrations measured? (Optional)	No
Were adequate raw data included?	Yes

Results for the most sensitive parameter of each species*

Species	Parameter	Inhibition (%)
Cabbage	height	21
Cucumber	height = dry weight	18
Lettuce	no parameter inhibited	N/A
Radish	dry weight	15
Soybean	height	12
Tomato	dry weight	3
Corn	"	18
Oat	height	20
Onion	"	4
Ryegrass	"	23

*The most sensitive parameter is based on percent inhibition.

Observations: No visual phytotoxicity signs (chlorosis, desiccation, poor vigor or death) were observed during the test.

Statistical Method: Analysis of variance was conducted for each species parameter. It was stated that effects on measured parameters were less than 25%.

13. **VERIFICATION OF STATISTICAL RESULTS:** Tier 1 testing does not require statistical analyses. Upon review of the raw data, the values were verified and are correct. None of the measured parameters were affected by 25% or greater.
14. **REVIEWER'S COMMENTS:** The formulated material and ammonium sulfate were mixed in equal amounts (i.e., 5.9 pounds of each per acre). A surfactant (Latron AG 98) was also added to the spray mixture at a concentration of 2.5 mL/L. If the test material is only to be applied in this manner (with ammonium sulfate and surfactant), then this study is scientifically sound, fulfills the guideline requirements, and can be classified as "core for a formulated product." However, since the usage was not explained by the author, the study is classified as **Supplemental**.